



human CAP-1

60
MLSHNTMMKQKQKQATAIMKEVHGNDVDGMDLGKKVSIIPRDIMLEELSHLSNRGARLFKM
120
RQRRSDKYTFENFYQSRQAQINHSIAMQNGKVDGNSLEGGSQQAPLTPPNTPDPRSPNP
180
DNIAPGYSGPLKEIPPEKFNTTAVPKYYQSPWEQAISNDPELLEALYPKLFKPEGKAEPL
240
DYRSFNRVATPFGGFEKASRMVKFKVPDFELLTDPREFMSFVNPLSGRRSFNRTPKGI
SENIPVITTEPTDDTTVPESDL

FIG. 1A

mouse CAP-1

60
MLSHSAMVKQKQKQASAITKEIHGHDVDGMDLGKKVSIIPRDIMIEELSHFSNRGARLFKM
120
RQRRSDKYTFENFYQSRQAQINHNIAHQNGRVDGNSLEGGSQQGPSTPPNTPDPRSPNP
180
ENIAPGYSGPLKEIPPERFNTTAVPKYYRSPWEQAIGSDPELLEALYPKLFKPEGKAEPL
240
DYRSFNRVATPFGGFEKASKMVKFKVPDFELLTDPREFLAFANPLSGRRCFNRAPKGV
SENIPVITTEPTEDATVPESDDL

FIG. 1B

human CAP-2

60
MPLSGTPAPNKKRKSSKLIMELTGGGQESSGLNLGKKISVPRDVMLEELSLLTNRGSKMF
120
KLRQMRVEKFIYENHPDVFSDDSSMDHFQKFLPTVGGQLGTAGQGSYSKSNRGGSQAGG
180
SGSAGQYGSDDQQHHLGSGSGAGGTGGPAGQAGRGAAGTAGVGETSGDQAGGEGKHITV
240
FKTYISPWERAMGVDPQQKMELGIDLLAYGAKAELPKYKSFNRTAMPYGGYEKASKRMTF
QMPKFDLGPLLSEPLVLYNQNLNRPSEFNRTPIPWLSSGEPVDYNVDIGIPLDGETEEL

FIG. 1C

mouse CAP-2

60
MPLSGTPAPNKKRKSSKLIMELTGGGRESSGLNLGKKISVPRDVMLEELSLLTNRGSKMF
120
KLRQMRVEKFIYENHPDVFSDDSSMDHFQKFLPTVGGQLETAGQGSYKSGSSGGQAGSSG
180
SAGQYGSDRHQQSGFGAGSGGGPGGQAGGGGAPGTVGLGEPGSDQAGDGKHVTVFKT
240
YISPDDRAMGVDPQQKVELGIDLLAYGAKAELPKYKSFNRTAMPYGGYEKASKRMTFQMP
KFDLGPLLSEPLVLYNQNLNRPSEFNRTPIPWLSSGGEHVDYNVDVGIPLDGETEEL

FIG. 1D

mCAP-1	M L S H S	M V	Q R	Q Q A S A I T K E I H	H D V D	M D	L O R K	V I
mCAP-2	M P L S G T P	P N	R	S S K L I M E L T G G	R E S S	L N	L O R K	I V
mCAP-1	P N D I	N I	I E L S	H F S	K R	A R L	M R	S D
mCAP-2	E N D V	V	L E L S	L L T	N R	S K M	L R	K Y T F
								K F I Y
								F H P D V F S
mCAP-1	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -
mCAP-2	D S S M D H F Q K F L P T V G G	L L	T A G	I N H N I A M Q N	G R V D	G Q A	G S G	
mCAP-1	E G S	- - - -	- - - -	P S T P P N T P D P R S P P N P E N I	A P C	Y S S	P L	
mCAP-2	S A Q Y G S D R H	S G	F C A G C S G G P G Q A G G G G	X Y S	P L			
mCAP-1	K E I P P E R F N T	- - - -	- - - -	T A P K Y R	S P T	E L L E A	Y	
mCAP-2	E P G S G D Q A G G D G K H V T	V F	T I	S P T	E L L E A	Y		
mCAP-1	P K	F K P E G	R D	R P K	K			
mCAP-2	I D	L A Y G A	P K	K				
mCAP-1	D	E L L	T D P R F L A F A N P	G R C	A P	K G	V	E N I P
mCAP-2	K	D G P	L S E P L V L Y N Q N	P S	T I P	L	S G E H	D
mCAP-1	I T T E P T E D A T V P S D D							
mCAP-2	Y N V D - V G I P L D G E T E E							

FIG. 1E

10 20 30 40 50 60 70 80 90
GTC CAGGTTTCAAGGATAAAAACATCAAGGCCAAGTCCCATATGCTCATCTCAGAGCTTCTCTCCACAAAC TGGGATTTCATCCCGTGAAAAAG
CAGGGTCCAAGTTCTATTATTTGGTAGTCCGGGTTCTAGGTTAGTATAGGTAGAGGTTCTCAGAAGCAGGCTTTTAC CCTAAGTAGGGGCGACTTTTTC

110 120 130 140 150 160 170 180 190 200
CACAAATCTAACAGCAAGGAACAAAAAACCATGCTCTACATATAATCATATGATGAAGCAGAGAAAACGCAAGCAACGCCATCATGAAGGAATGCTCAT
GTGTTAGATTCTCGTTCCTCTGTTTTTTTGGTAGCATAGTGATTATGATACTACTTCTGCTCTCTTTGTCGTTCTGTCGGTAGTACTTCTCTCAGGTAT

210 220 230 240 250 260 270 280 290 300
GGAAATGATGTTGATGGCATGGACCTCGGGCAAAAAAGGTGCAGCATCCCCAGAGACATCATGTTGGAAGAAATATCCCATCTCAGTAACCGTGGTGCCAGGC
CCTTTACTACAAC TACCGTACTGGACCGGTTTTTCCAGTCTGAGGGGTTCTGTAGTACAACCTCTTAATAGGGTAGAGTCATTGGCACACACGGTCTCG

310 320 330 340 350 360 370 380 390 400
TATTTAAGATCGGCTAACCAAGATCTGCACAAATACACATTTGAAAAATTTCCAGTATCAATCTAGAGCAACAAATAAATACAGTATTGCTATGCAAGAAATG
ATAAAATCTACGACGTTTCTCTAGACTGTATTATGTGTAAACTTTTAAAGGTCATAGTTAGACTCTGTTTATTATTAGTGTCAATACGATACGCTCTATTC

410 420 430 440 450 460 470 480 490 500
CAAAGTGAATGGAAGTAATCTTGAAGAGTGGTTCGACGCAAGCCCTTGAAGTCTCCCAACACCCAGATCCACGAAGCCCTCAAAATCCGACAGCAACAT
CTTCTACCTACTCTTCATTGAACCTTCCCAACCAAGCGTCTGTCGGGGAACATGAGGAGGGTTGTGGGGTCTAGGTGCTCGGGAGGTTTAGGTCTGTGTAA

510 520 530 540 550 560 570 580 590 600
GCTCCAGGATATTCTGGACCATGAAGGAAATTCCTGCTGAAAAATTC AACCCACAGCTGCTCCTTAAGTACTATCAATCTCCTCGGGGACGAAGCCATT
CGAGGTCCTATAAGACCTGGTGACTTCTTTAAGGACGACTTTTAAAGTTGTGGTGTGACAGGAGTTATGATAGTATAGGGGACCTCGTTCGGTAAT

610 620 630 640 650 660 670 680 690 700
GCAATGATCGGGAGCTTTTAGAGGCTTTATATCTTAACTTTTCAAGCTCGAAGGAAGGACGAAGCTGCTGATTACAGGAGCTTTAAACAGGGTTGGCAC
CGTTACTAGGCTTCGAAATCTCGAAATATAGGATTTGAAAAGTTTCCGACTTCTTCCGCTTCAGGACTAATGTCTCGAAATTTGCTTCCACCGGTTG

710 720 730 740 750 760 770 780 790 800
ACCATTTGGAGGTTTTGAAAAAGCATCAAGAAATGGTTAAATTTAAAGTTCCAGATTTTGAAGTACTATTGCTAACAGATCCAGGTTTATGTCCTTTGTC
TGGTAAACCTCCAAAACCTTTTCTGAGTCTTACCAATTTTAAATTTCAAGGTCATAAACTCGATGATAACGATTGTCTAGGGTCCAAATACAGAAACAG

810 820 830 840 850 860 870 880 890 900
AATCCCTTTCTGGCAGCCGGTCTTTAATAGGACCTTAAGGGATGGATATCTGCAGAAATATTCCTATAGTGATACAAACCGAACCTACAGATGATACCA
TTAGGGGAAAGACCGCTCGCAGGAAATATCTCGAGGATTCCTCACTATAGACTCTTATAAGGATATCACTATTGTGCTTGGCTTGGTCTACTACTTGGT

910 920 930 940 950 960 970 980 990 1000
CTGTACCAGAAATCAGAAAGCTATGAAAAGAAAGTTGTATGTCGCACATAAAATCTGTAATATAAAGTTGTGCTTACTATTTAATCACTGGGCAAG
GACATGGCTTAGTCTTCGTGATCTTTCTTCAACATACACGGTGATTTTGGAGCTTATATTTTCAACGACAGATGATAAAATTTGATGACCTTTTC

1010 1020 1030 1040 1050 1060 1070 1080 1090 1100
CACTTGCAATTTTTCAATGATAGCAACATGACAAATTTAGTCAATTTCTCTTTCTGCACATTCAAATTTCAATCTCAGATCAAAATCTAATAAACAATTAGAA
GTGAACGTAAAAAGTAATCATCTGTGTTATCTGTTAAATCACTAAAAGGAAAGACTGTAAGTTAAAGTTAGAGTCTAGTTTATGATTTTGTAACTTT

1110 1120 1130 1140 1150 1160 1170 1180 1190 1200
ATCTTCAATTTAAAAAATCTATAACTCACTGTCTCTCACTCATATAATTTGTTTTCACTCGGTTTAAAGAAATCCAGATATTTTTACTGCAAAAGTTTCAGATG
TAGAATGAAATTTTTTGAATATTGAGTGAACAGAAGTAAATATAAATAAGTGAACCAAAATTTCTTAGGCTATAAAATGACGTTTTTCAAGTCTACC

1210 1220 1230 1240 1250 1260 1270 1280 1290 1300
AAAAGTAATGACAGCTTCACCTTTGCTCTCAATTTATATGATTTATTCAGTGTAAAGTTTTCAAGTGCAATCTAGAAATCAAAATACAGGGAGAGATATG
TTTTTCAATCTGTCGAAGTGGAAACAGAGTAAAAATATACTAAATAATGTACATTCAAAAAGTTCAACTTATAGTTTATGTCTCCCTCTATATG

1310 1320 1330 1340 1350 1360 1370 1380 1390 1400
AAGACCTATCTCAGAGTTTCACTCGGGATCAAGAGCTATGGAAGATGATGTACAAATTTATGATGGAGAAATGGTTGGTGCTCTTTCTGGTGACCA
TCTCGATAAGTCTCAAGGTAGACCTTCTTTCGATACCTCTACTACATGTTTACGATAAATCACTCTTTTACCAACCCACAGGAAAGCACTCGGT

1410 1420 1430 1440 1450 1460 1470 1480 1490 1500
TGAGAAAAATATATGCTTTGATGAAGTCTTTTTCATAGTCACTCTTAGAAATTTAAAGTGCTTTGCACCTTTCAATATGTTTGAATCAATAGGTAATTT
ACTCTTTTATATACAGAACTACTTCAGAAAGTAATCAGTGAGATCTTAAAGTTTCAGCAAGCTGAAAGTTATACAAAATCTAGTAATCCATTAA

1510 1520 1530 1540 1550 1560 1570 1580 1590 1600
AATTCTGATGATATCTCCAAAATTCAAATTCAGTTATATATTCATTTAGCATTAAAGTCAGGAGCTGAGAACTGACTCAAGGGAGGCTATGATACCAT
TAAGACCTACTATAAGAGGTTTTAAGTTAAGTCAATAATAAGTAATAATCGTAATTCAGTCTCTGCTCACTCTACTAGTTCCTCCAGTATCATGGTAT

1610 1620 1630 1640 1650 1660 1670 1680 1690 1700
GTTTTAAGGACCAAGGTGTCGCCAGAAATCAAGTTTCAAAAATCCCAATGCTGTGCAATGATTATGTTTCAACTTTATGTGTGCATTCTGGAAGAGTAAG
CAAAATTCCTGGTCCACACCGGCTTAAAGTCAAGTGTTAGGGTTACGACACGTAACATAACAAGTTGAATACAGCACTAAGAAATCTTCTCAATTC

1710 1720 1730 1740 1750 1760 1770 1780 1790 1800
AACAATAAAGTACACCGTAATATACATATAAATACATTCATGTTTGTGAGAGAAAGAAAGTAGTAATTTGAATTTGGCAGCTTTCTTTGCTTAAATCT
TTGTTTATTTCACTGGCACTATATATGATATTTATGTAAGTACAAACACTCTCTCTCTTCTCAATTCATAAACTTAAACCGTGAAGAAAGCAATTTAGA

1810 1820 1830 1840 1850 1860 1870 1880 1890 1900
TTAAATTCCTGTAAGATCTCAAGTAACCTGGGAGTACATCTTTAGGACACAAACAAAGGAGCTGAAAGTATCTGAAGGCAATGAGACATATA
AATTTAAGCAAACTTAGGAGTTCATTGACCCCTCATGTAGCGAAATCTCTGTGTTGTTTGTGTTCCGCTACTTTCATAGACTTTCTGTATCATCTGTAT

1910 1920 1930 1940 1950 1960 1970 1980 1990 2000
TCTATCGTAATATATGTAATATATTGACATATAAGGACACAACTATATAAAGTTATAGTTATATCTTAAATATAAATGAAGAGCATATGACATATAA
AGATAGCATATATACATATATATACTGATATTTCTGTGTTTGAITATATTTCAATATCAATATAGAAATTTATATTAATCTTCTGATATCTGTATAT

2010 2020 2030 2040 2050 2060 2070 2080 2090 2100
CTTATAGAAATCAGTATCAATCTCCCATTTTCAATTCAGTTAAGACTTCTGTGATAGATGTTTATAGCAGAGAGAAAGTCTCATCATAGTGAAGAACT
GATATCTTTAGTCAATGTTAAGGAGGCTTAAAGTTAAGTCAATCTGAAGCACATCTACAAATATCGTCTCTCTTTACAGAGTATGTTATCTTTTGA

2110 2120 2130 2140 2150 2160 2170 2180 2190 2200
ATCAGATAAAGTTTAGGAGATAGGAAGAGGACTGTGTGTAGTAATGAAAATACCAAGTTTGCACATTTACATGTTTACAAAAAATCTGTGTTTGTAGT
TAGTCTAATTTCAATCTCTATCTCTCTCGACACACATCACTTCTTTATGCTTCAAGCTGTGAAGTACAAATGTTTTTTTACAGCAACATCA

2210 2220 2230 2240 2250 2260 2270 2280 2290 2300
GTGGAAGTTGGTGACTGTTTTAATCATCATCTAGACTGTGTTAAGTAGAAAAATTTTAAAAATTTGCTTATGAAATATAACCCCGCAAGAGTAAACATGA
CACCTTCAACCACTGACAAAATTAGTAGTAGATCTGAACAAATTCATCTTTTAAAAATTTTAAACGAATACTTTATATGGGGGCTTTTCACTGTGTACT

2310 2320 2330 2340 2350 2360 2370 2380 2390 2400
CAAGTATATATATATATATATATTTGTAGAGAAATTTGTATATTTTAAAGATGCTTTAGCTATCTTAATTTTATTTATAGATTTTGGGTTTACCTGT
GTTTCAZATATAAATATATATAATACATCTCTTAAACATATAAAAATTTTACAGAAATCTATAGAAATTAATAAATATCTAAACACCAAAATGGAC

2410 2420 2430 2440 2450 2460 2470 2480 2490 2500
TTTTAAATGATAAAGTTGGCATCTGTGATAAATCATCAATGAGGCTCCCATCATGCCATTTTTTGTCTATTTTAAATCTTTAAAAAATAAAAATTAGGCA
AAAAATTTTACTATTACAAACCGTAGACATCTTTGATAGTTTACTCGGAGGGTAGTCGGTAAAAAACAGTAAAAATTAGAAATTTTTTATTTTAAATCCGT

2510 2520 2530
TATTAAAAAATTTTTTTTTTTTTTTTTTTTTT
ATAATTTTTTTTTTTTTTTTTTTTTTTTTT

FIG. 2A

mouse CAP-1

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10      20      30      40      50      60      70      80      90     100
ATTCGGCACATGGGATCGAGGGACCATGCCGTTCCAGGTTCAAGGATAAAACCCATTGGGCCATAGTGGCGTCATATTCCACCTTCAGTGCCTTCCTCCA
TAAGCCCTGTACCTTAGCTCCCTGGTACGGCAAGGTCCAAGTTCTATTITGGGTAACCCGGTATCACGGCAGTATAAGGTGGAAAGTCACGGAAGGAGGT

110     120     130     140     150     160     170     180     190     200
CAATTGGGATTACCCCTGCTGAAAAGCGCACGCTCAGGCAAGGGAACAAAAAATATGCTATCACATAGTCCCATGGTGAAGCAAAAGGAACAGCAAG
GTTAACCCCTAAGTGGGGACGACTTTTCGCGTGGGACTGTGCTTCCTTGTITTTTGATACGATAGTGTATCAGCGTACCACCTTCCTTTGCTGCTTC

210     220     230     240     250     260     270     280     290     300
CATCAGCCATCACGAAGGAAATCCATGGACATGATGTTGACGGCATGGACCTGGGCAAAAAAGTTAGCATCCCCAGAGACATCATGATAGAAGAAATTGTC
GTAGTCGGTAGTGCTTCTTTAGGTACCTGTACTACAACCTGCCGTACCTGGACCCGTTTTTTCAATCGTAGGGGTCTCTGTAGTACTATCTCTTAACAG

310     320     330     340     350     360     370     380     390     400
CCATTTCAGTAATCGTGGGGCCAGGCTGTTTAAGATGCGTCAAGAAGATCTGACAAATACACCTTTGAAAAATTTCCAGTATGAATCTAGAGGACAAATT
GGTAAAGTCATTAGCACCCCGGTCCGACAAATTCTACGCAGTTCTTTCTAGACTGTTTATGTGGAAACTTTTAAAGGTACATCTTAGATCTCGTGTITAA

410     420     430     440     450     460     470     480     490     500
AATCACAAATATCCCATGCAAAATGGGAGAGTTGATGGAAGCAACCTGGAAGGTGGCTCACAGCAAGGCCCTCAACTCCGCCCAACACCCCGATCCAC
TTAGTGTTATAGCGGTACGCTTACCCTCTCAACTACCTTCGTTGGACCTTCCACCGAGTGTGCTTCGGGGAGTTGAGGCGGGTTGTGGGGCTAGGTG

510     520     530     540     550     560     570     580     590     600
GAAGCCCCCAAAATCCAGAGAATATCGCACCAAGGATATTTCTGGACCACTGAAGGAAATTCCTCTGAAAGGTTTAAACACGACGGCGCTTCTTAAGTACTA
CTTCGGGGGGTTTAGGTCCTTTGTAGCGTGGTCTATAAGACCTGGTGACTTCTTTAAGGAGGACTTTCCAAATTGTGCTCCCGCAAGGATTCATGAT

610     620     630     640     650     660     670     680     690     700
CCGGTCTCCATGGGAGCAGGCGATTGGCAGCGATCCGGAGCTCTGGAGGCTTTGTACCCAAAACCTTTCAAGCCTGAAGGAAAAGCAGAACTCGCGGAT
GGCCAGAGGTACCTCTGTCGGTAACTGGTGGCTAGGCTCGAGGACCTCCGAAACATGGGTTTGAAGGTTCCGACTTCTTTTCTGCTTTGACGCCCTA

710     720     730     740     750     760     770     780     790     800
TACAGGAGCTTTAACAGGGTTGCCACTCCATTTGGAGGTTTGAAGGCAATCAAAAATGGTCAAAATTCAAAGTTCCAGATTTTGAACACTACTGCTGCTGA
ATGTCCTCGAAATTTGCCAACGGTGAGGTAACCTCCAAAACCTTTTCTGAGTTTATACAGTTTAAAGTTTCAAGGCTTAAACTTGATGACGACGACT

810     820     830     840     850     860     870     880     890     900
CAGATCCCAAGTTCTTGGCTTTGCCAATCTCTTTGGGCGAGCGATGCTTTAACAGGGCGCCAAAGGGGTGGGTATCTGAGAAATATCCCGTCTGTGAT
GTCTAGGGTCCAAAGAACGGAAACGGTTAGGAGAAAGCCGCTGCTACGAAATTTGCCCGGGTTTCCCAACCCATAGACTCTTTATAGGGGCGACACTA

910     920     930     940     950     960     970     980
CACAACTGAGCCTACAGAAGACGCCACTGTACCGGAATCAGATGACCTGTGAGAGGGAAGCTGGGGATGCCACAGGAAGTTT
GTGTTGACTCGGATGCTTCTGCGGTGACATGGCCTTAGTCTACTGGACACTCTCCCTTCGACCCCTACGGGTGCTCTCAAG

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FIG. 2B

human CAP-2

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CGGTACAGC AGCTCAGTC TCCAAAGCTG CTGGACCCCA GGGAGAGCTG ACCACTGCCG GAGCAGCCGG CTGAATCCAC CTCACAATG CCGCTCTCAG      100
GAACCCCGGC CCTAATAAG AAGAGGAAAT CCAGCAAGCT GATCATGGAA CTCACTGGAG GTGGACAGGA GAGCTCAGGC TTCAACCTGG GCAAAAAGAT      200
CAGTGTCCCA ACGGATGTGA TGTGGAGGA ACTGTGCTG CITACCAACC GGGGCTCCA GATGTTCAA CTGGGGCAGA TGAGGGTGA GAAGTTTATT      300
TATGAGAACC ACCCTGATGT TTTCTGTGAC AGCTCAATGG ATCACTTCCA GAAGTTCTT CCACAGTGG GGGCAGAGCT GGCACAGCT GGTGAGGCAT      400
TCTATACAG CAAGAGCAAC GGCAGAGGGC GCAGCCAGGC AGGGGGCAGT GGTCTGCCG GACAGTATGG CTCTGATCAG CAGCACCATC TGGGCTCTGG      500
GTCTGGAGCT GGGGGTACAG GTGGTCCCG GGGCCAGGCT GGCAGAGGAG GAGCTGCTGG CACACAGGGG GTTGGTGAGA CAGGATCAGG AGACCAGGCA      600
GGCGGAGAAG GAAACATAT CACTGTGTC AAGACCTATA TTTCCCATG GGAGCGAGCC ATGGGGGTG ACCCCAGCA AAAAATGGA CTGGGCATTG      700
ACCTGCTGGC CTATGGGGCC AAAGCTGAAC TTCCCAATA TAAGTCTTC AACAGGACGG CAATGCCCTA TGGTGGATAT GAGAAGGCT CCAAACGCAT      800
GACCTTCAG ATGCCAAGT TTGACCTGGG GCGCTTGCTG AGTGAACCC TGGTCTCTA CAACCAAAAC CTCTCCAACA GGCTTCTTT CAATCGAACC      900
CCTATTCCCT GGCTGAGCTC TGGGAGGCT GTAGACTACA ACGTGGATAT TGGCATCCC TTGGATGGAG AAACAGAGGA GCTGTGAGGT GTTCTCTCT      1000
CTGATTGCA TCATTTCCTC TCTCTGGCTC CAATTGGAG A

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FIG. 2C

mouse CAP-2

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100
GGCGGGGAGA GCGGACCACC AACTGAGCAG CTGGTCAGAT CCACCTCCAC CATGCCACGC TCAGGAACCC CGGCCCCCTAA CAAGAGGAGG AAGTCAAGCA
200
AACTGATTAT GGAGCTCACT GGAGGTGGCC GGGAGAGCTC AGGCGTGAAC CTGGGCAAGA AGATCAGTGT CCCAAGGGAT GTGATGTTGG AGGAGCTGTC
300
CCTTCTTACC AACCAGGGCT CCAAGATGTT CAAGCTACGG CAGATGCGGG TGGAGAAATT TATCTATGAG AATCACCCCG ATGTTTTCTC TGACAGCTCA
400
ATGGATCACT TCCAGAAGTT TCTTCCACA GTGGGAGGAC AGCTGGAGAC AGCTGGTCAG GGCTTCTCAT ATGGCAAGGG CAGCAGTGGA GGCCAGGCTG
500
GCAGCAGTGG CTCTGCTGGA CAGTATGGCT CTGACCGTCA TCAGCAGGGC TCTGGGTTTG GAGCTGGGGG TTCAGGTGGT CCTGGGGGCC AGGCTGGTGG
600
AGGAGGAGCT CCTGGCACAG TAGGGCTTGG AGAGCCCGGA TCAGGTGACC AGGCAGGTGG AGATGGAAAA CATGTCACTG TGTTCAGAC TTATATTTC
700
CCATGGGATC GGGCCATGGG GGTTCATCCT CAGCAAAAAG TGGAACTTGG CATTGACCTA CTGGCATACG GTGCCAAAGC TGAAGTCCCC AAATATAAGT
800
CCTTCAACAG GACAGCAATG CCCTACGGTG GATATGAGAA GGCTCCAAA CGCATGACCT TCCAGATGCC CAAGTITGAC CTGGGGCCTC TGCTGAGTGA
900
ACCCCTGGTC CTCTACAACC AGAACCTCTC CAACAGGCTT TCTTCAATC GAACCCCTAT TCCCTGGTTG AGCTCTGGGG AGCATGTAGA CTACAACGTG
1000
GATGTTGGTA TCCCTTTGGA TGGAGAGACA GAGGAGCTGT GAAGTGCTC CTCTGTGAT GTGCATCATT TCCCTTCTCT GGTTCGAATT TGAGAGTGGA
1100
TGCTGGACAG GATGCCCAA CTGTTAATCC AGTATTCTTG TGGCAATGGA GGGTAAAGGG TGGGGTCCGT TGCTTTTCCA CCCTTCAAGT TCTGTCTCCG
AAGCATCCCT CCTCACCAGC TCAGAGCTCC CATCTGCTG TACCATATGG AATCTGCTCT TTTATGGAAT TTTCT

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FIG. 2D

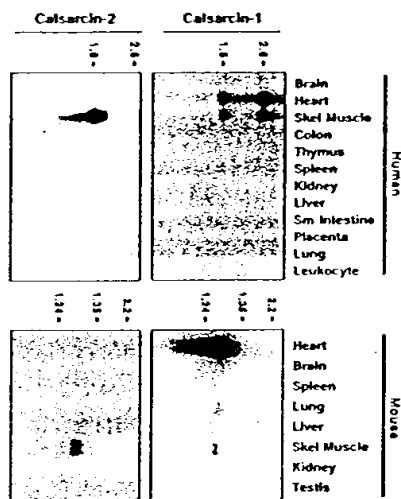


FIG. 3

FIG. 4C

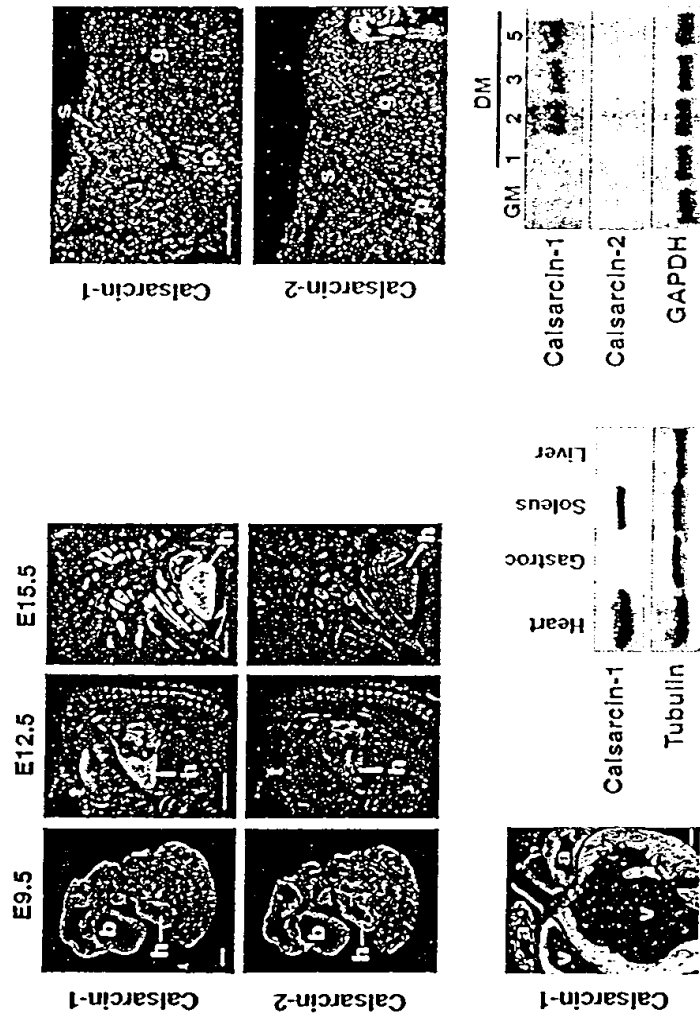


FIG. 4A

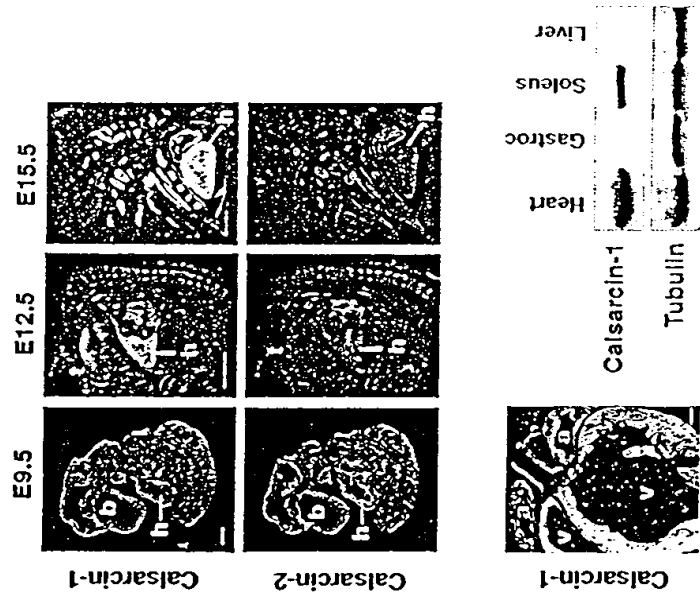


FIG. 4B

FIG. 4D

FIG. 4E

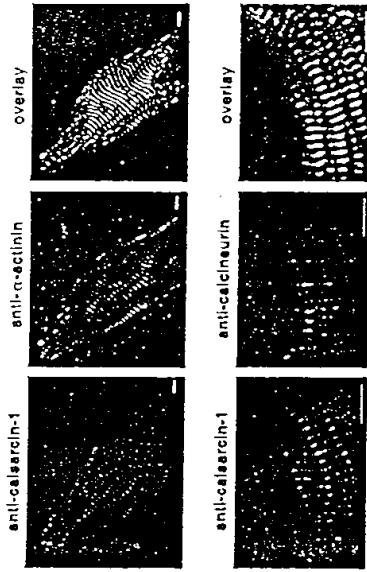


FIG. 5A

FIG. 5B

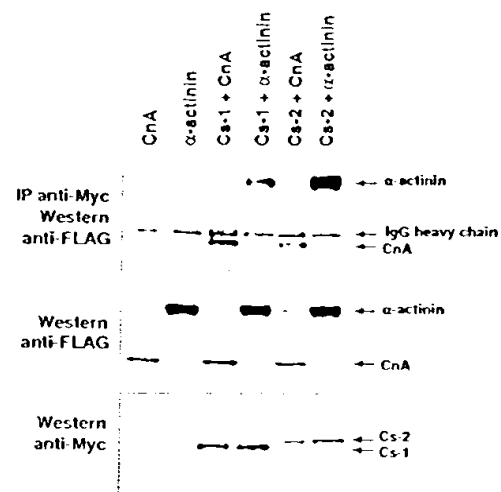


FIG. 6A

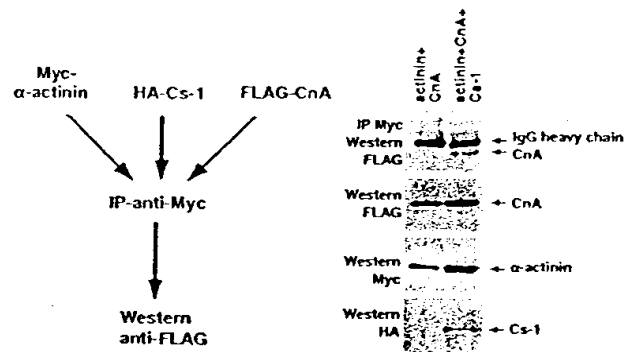


FIG. 6B

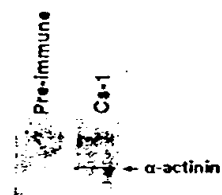


FIG. 6C



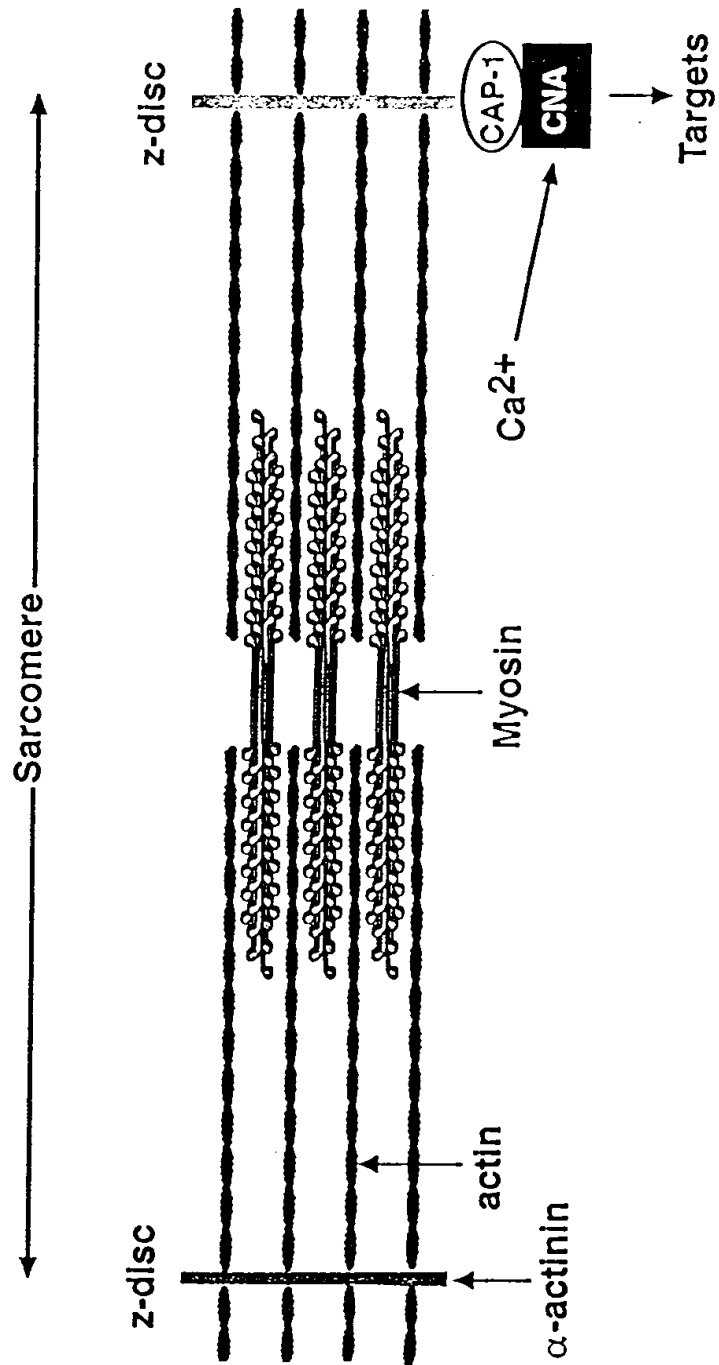


FIG. 8

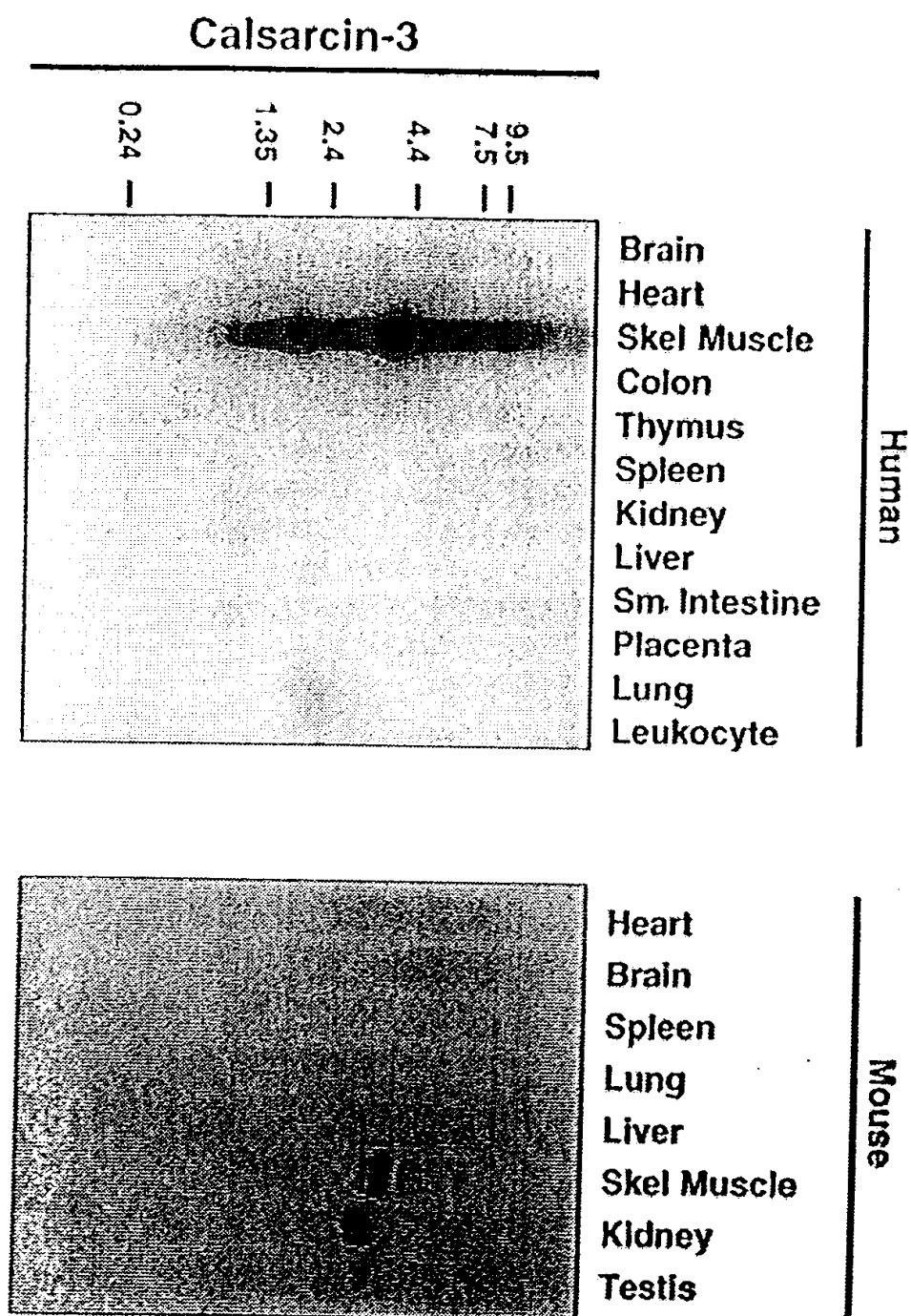


FIG. 9

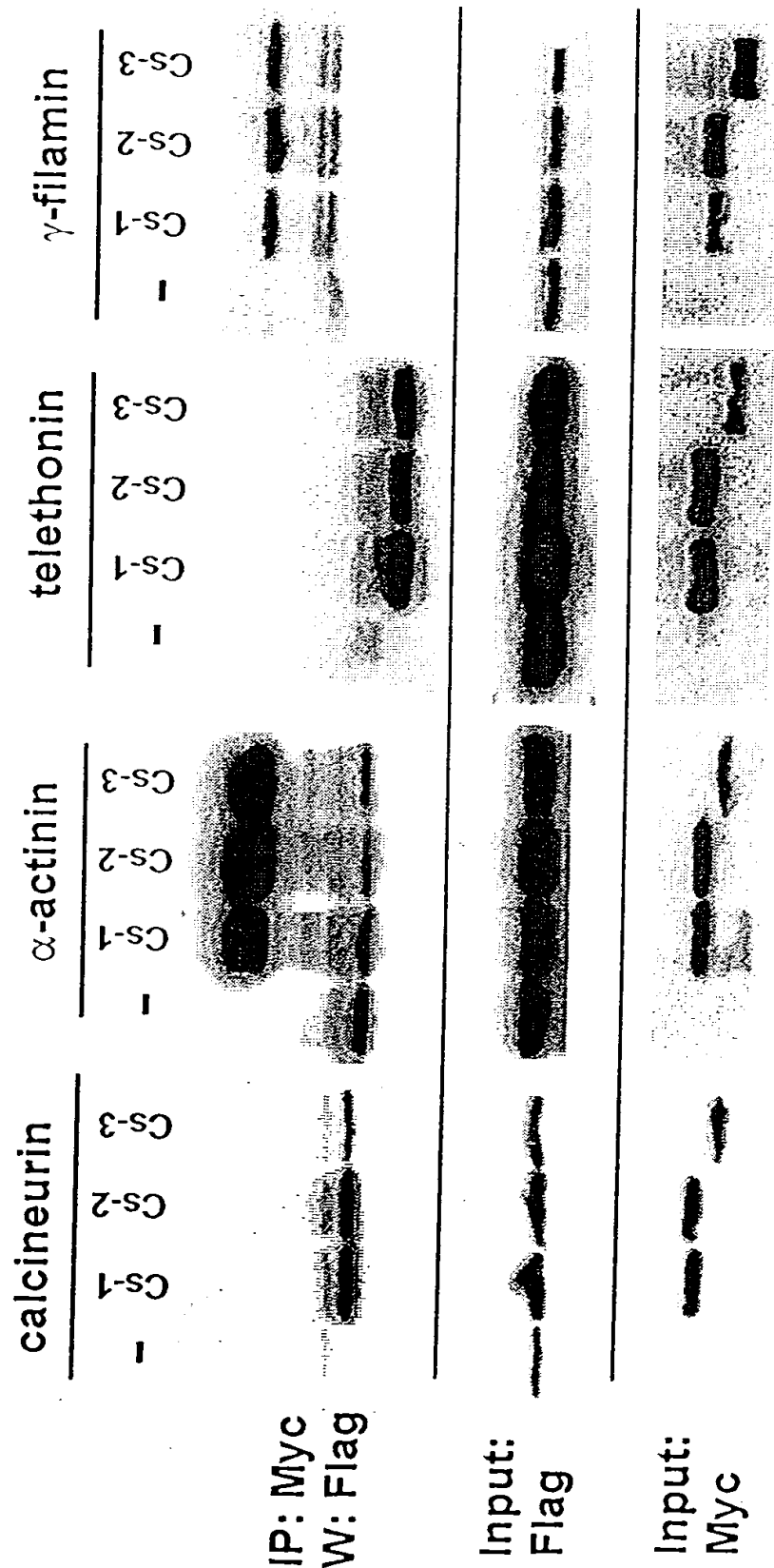
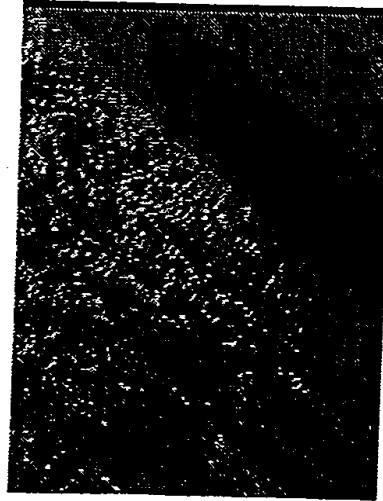
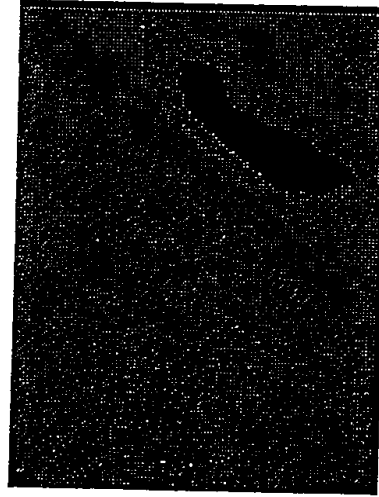


FIG. 10

calsarcin-3



actinin



merge

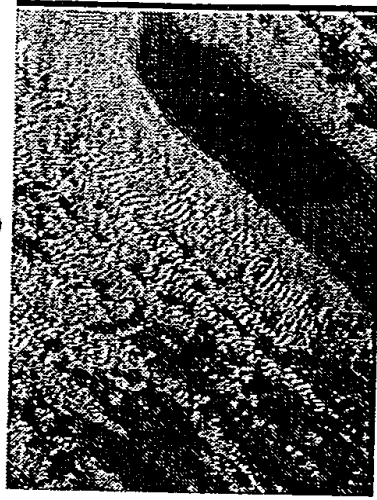
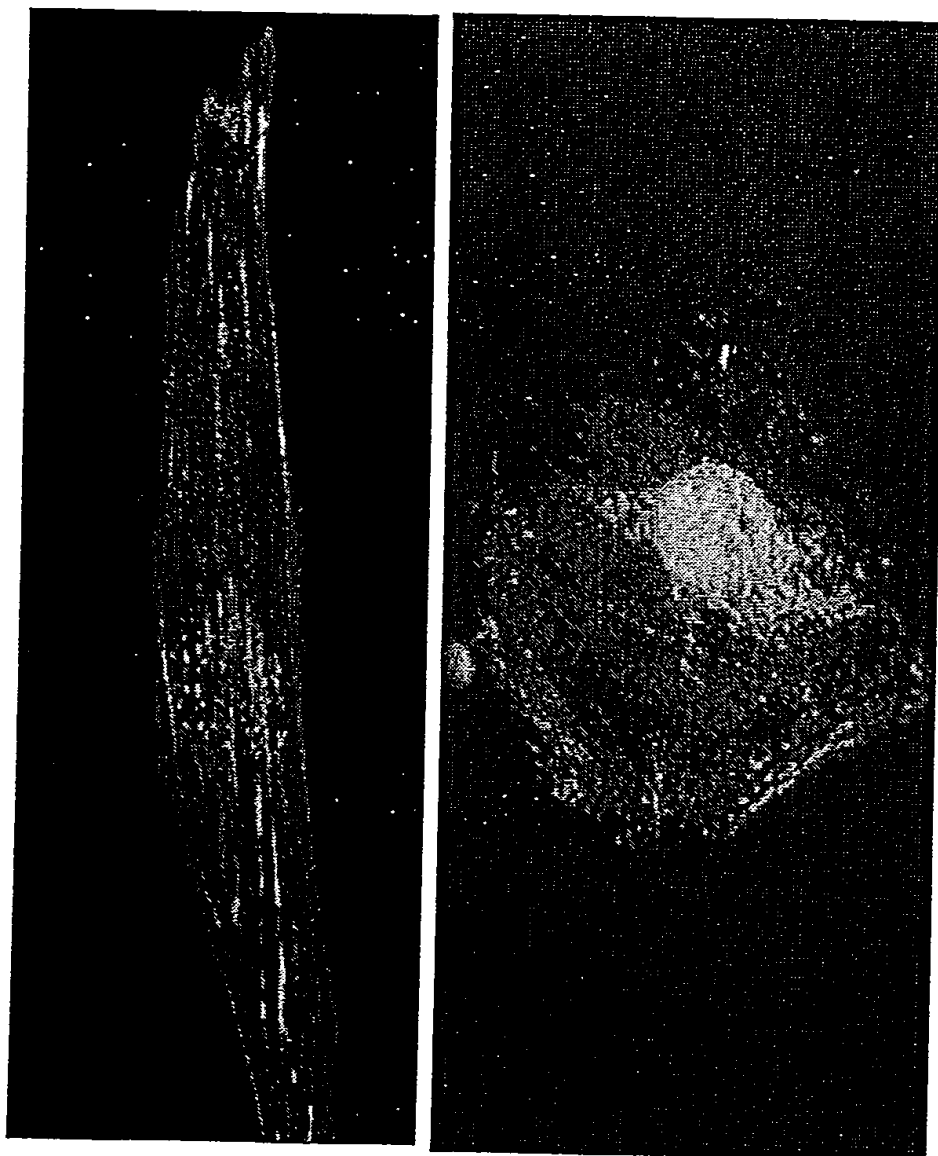


FIG. 11

FIG. 12



calarscin-3		1	M P L S H N T M K K R A Q A M P . K Q K O P M A A M G D L T E P V P T L D L G K K S V P Q D M E E L S I R N NR 47
calarscin-2		1	M P L S H N T M K K R A Q A M P . K Q K O P M A A M G D L T E P V P T L D L G K K S V P Q D M E E L S I R N NR 55
calarscin-1		1	M L S H N T M K K R A Q A M P . K Q K O P M A A M G D L T E P V P T L D L G K K S V P Q D M E E L S I R N NR 53
calarscin-3		48	G S L L F K Q R Q R R V K F T F E L A A S Q R A M L A G S A R R K V G A B S G T V A N A N G P E O P N Y 102
calarscin-2		56	G S L L F K Q R Q R R V K F T F E L A A S Q R A M L A G S A R R K V G A B S G T V A N A N G P E O P N Y 102
calarscin-1		54	G S L L F K Q R Q R R V K F T F E L A A S Q R A M L A G S A R R K V G A B S G T V A N A N G P E O P N Y 108
calarscin-3		103	R S E L N I F P A P G A S L G G P E G A H P A A P A G C V P S P S A L A P G Y A E P L K Q V P P 152
calarscin-2		109	K S N G G G S Q A G G S G Q Y G S D Q Q H L G S G S G A G G T G G P A Q A G K O G A A G 158
calarscin-1		95	S N I E G G S Q Q . A P L P P N T P D P K S P N P D N A P G Y G P L K E P P 136
calarscin-3		153 E K F N H T A P K G Y E R C P W Q E F S Y R D Y Q S D G R S 183
calarscin-2		159	T T O V G E T G S D Q A G G E O K H I V F K T T Y I S P W E R A M G V D P Q Q K M E L O I D L L A Y O A K A 213
calarscin-1		137 E K F N T A V P K Y Y Q S P W E Q A S N D P P L L E A L Y P K L F K P E G K A 177
calarscin-3		184	H T P S P N D Y R N F N R T P P F G G P L V G G . . . T F P R P G T P F I P E P L S Q L E L R L R 231
calarscin-2		214	E L P . . . K Y S S F N R T A P F G G E K A S K R M T F O M P K F D L G P L S E P L V L Y N Q N L S N R 265
calarscin-1		178	E L P . . . D Y R S F N R V A T P F G G E K A S R M U K F K V P D F E L L L T T D P R F S F U N P L S G R 229
calarscin-3		232	P S F N R V A G G W R N L P E S . . . E E L 251
calarscin-2		266	P S F N R T P I P W S S G E P D Y N V D I O I P L D O . F T E E L 299
calarscin-1		230	R S F N R T P G W S E N I P P V I T E P T D D T T V P E S E D L 264

FIG. 13